

WHAT IS CLAIMED IS:

1. Process for scanning at least one register mark (1) on a printing medium (3) in a printing machine, whereby at least one register mark (1) is imprinted on the first form side (4) of the printing medium (3) and the register mark (1) is scanned by an initial sensor (10), comprising: inverting the printing medium (3), scanning the register mark (1) on the first form side (4) is scanned, and using the register mark (1) on the first form side, ascertaining whether the reverse side (5) is in register.
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2. Process according to Claim 1, wherein the register mark (1) on the first form side (4) is scanned by a second sensor (11), which is mounted on the other side of the printing medium (3) in relation to the initial sensor (10).
- 15 3. Process according to Claim 1, wherein the register mark (1) on the first for side (4) is scanned by the initial sensor (10) through the printing material.
4. Process according to Claim 1, wherein the position of the
20 register mark (1) in relation to the printing medium (3) is scanned.
5. Process according to Claim 1, wherein the position of the printing medium (3) in relation to the conveyor belt (6) is scanned.

6. Mechanism to scan at least one register mark (1) on a printing medium (3) in a printing machine, with at least one register mark (1) on the first form side (4), comprising: an initial sensor (10) to scan the register mark (1) on the first form side (4) before the printing medium (3) is inverted, and to
5 scan the register mark (1) through the printing medium (3) after the printing medium (3) has been inverted.

7. Mechanism according to Claim 6, wherein a second sensor (11) to scan the register mark (1) through a conveyor belt (6) that is conveying the
10 printing medium (3) after the printing medium (3) has been inverted, whereby the second sensor (11) is mounted on the other side of the printing medium (3) in relation to the initial sensor (10).

8. Mechanism according to Claim 7, wherein the register mark
15 (1) has a triangular shape and the shift in position of the printing medium (3) at right angles to the direction of travel of the printing medium (3) can be scanned.